

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/052537

International filing date (day/month/year)
14.10.2004

Priority date (day/month/year)
15.10.2003

International Patent Classification (IPC) or both national classification and IPC
B29C49/64, B29C45/72

Applicant
S.I.P.A. SOCIETÀ INDUSTRIALIZZAZIONE ...

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITYInternational application No.
PCT/EP2004/052537

IAP20 Reg. G. 10 14 APR 2006

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/052537

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	8, 9, 10
	No: Claims	1-7, 11-15
Inventive step (IS)	Yes: Claims	9, 10
	No: Claims	1-8, 11-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
 INTERNATIONAL SEARCHING
 AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2004/052537

1 The following documents are referred to in this communication:

D1: GB-A-1 497 114 (MITSUI TOATSU CHEMICALS; KUREHA CHEMICAL IND CO LTD) 5 January 1978 (1978-01-05)

D2: US-A-5 326 258 (GITTNER FRANZ ET AL) 5 July 1994 (1994-07-05)

D3: WO 99/62693 A (ZOPPAS MATTEO ; SIPA SPA (IT)) 9 December 1999 (1999-12-09)

D4: US-A-5 066 222 (GITTNER FRANZ ET AL) 19 November 1991 (1991-11-19)

D5: US-A-5 308 233 (GERARD DENIS) 3 May 1994 (1994-03-03)

Re Item VIII.

2 CLARITY

The application does not meet the requirements of Article 6 PCT, because claims 1, 3, 4, 11 and the description are not clear.

2.1 Claims 1, 3 and 4: The definition of the matter for which protection is sought is not clearly indicated (Rule 6.3 PCT). The general statement "A conditioning device for plastic items.." should be replaced by a more clear statement. A suggestion from the examining division is to use the formulation "A conditioning device for injection moulded plastic preforms for use in blow mould plants..". A basis for this can be found in the first paragraph of the description of the present application.

2.2 Claim 11: The terms "said two sections" and "said ducts" used in claim 11 are unclear as these features here are mentioned for the first time, thereby rendering the definition of the subject-matter of said claim unclear, Article 6 PCT.

2.3 The vague and imprecise statement in the description on page 12 (lines 18 and 19) implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them.

Re Item V.

3 INDEPENDENT CLAIMS 1, 3 AND 4

Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-matter of claims 1, 3 and 4 is not new in the sense of Article 33(2) PCT, and therefore the criteria of Article 33(1) PCT are not met.

3.1 The document D1 discloses (the references in parentheses applying to this document):

A method for thermally conditioning (figure 1) plastic items comprising the following steps:

- Placing at least one plastic item on a chain conveyor or other continuous conveying device (3);
- feeding said plastic item(s) through a first thermal conditioning stage (along the heaters with ref. nr. 2 on the upper part in figure 1) and subjecting it/them to a first heating or cooling heat exchange, which produces a significantly greater heat exchange than would result from placing said plastic item(s) in the environment outside said first thermal conditioning stage for the same amount of time;
- removing said plastic item(s) from said first thermal conditioning stage and holding it/them outside said stage (the transport section on the way to the heating elements located in the lower part of figure 1) for a predetermined amount of time in order to redistribute the temperature inside said plastic item(s) with a predetermined degree of uniformity;
- subjecting said plastic item(s) to at least a second heat exchange (along the heaters with ref. nr. 1 and 2 on the lower part in figure 1), which produces a significantly greater heat exchange than would result from placing said plastic item(s) in the environment outside said first thermal conditioning stage for the same amount of time.

It is noted that also documents D2, D4 and D5 contain all features of claim 1.

3.2 The same reasoning as for claim 1 in paragraph 3.1 above applies, *mutatis mutandis*, to the subject-matter of the corresponding independent claim 3, which therefore is also considered not new.

It is noted that also documents D2, D4 and D5 contain all features of claim 3.

**WRITTEN OPINION OF THE
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3.3 The same reasoning as for claim 1 in paragraph 3.1 above applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 4, which therefore is also considered not new. In the upper part of figure 1 the preforms passes the same hot air blowers (2) several times and in the lower part of figure 1 the preforms passes the same hot air blowers and auxiliary heaters (1, 2) several times. Any of those two passages correspond to the subject matter of claim 4.

3.4 DEPENDENT CLAIMS 2, 5-7, 12-15

Dependent claims 2, 5-7, 12-15 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty (Article 33(2) and (3) PCT):

Claims of the present application:	Known from:
2	D1, D2, D4
5, 6	D5, figure 2
7, 12	D1, figure 1
13-15	D2, reference numbers 9,12

3.3 DEPENDENT CLAIM 8

Document D1, which is considered to represent the most relevant state of the art, discloses a plant from which the subject-matter of claim 8 differs in that the conveying means forms a closed path that bends in three dimensions and forms a non planar path.

The effect is that space can be saved as the conveyor not only lies in one plane but uses all three dimensions.

The problem to be solved is to save space.

The shape of the conveyor is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed. Heating conveyors using all three dimensions are well known in the field, see document D3, figures 6 and 7.

3.4 DEPENDENT CLAIMS 9, 10

The solutions provided by claims 9, 10 of the present application are novel and are further considered as involving an inventive step (Article 33(3) PCT) as the solutions which combines the use of spiral shaped conveyors and heating ducts which are passed by several spirals of the conveyor are neither known, nor fairly suggested by any single prior art document or any combination of prior art documents.

Re Item VII.

4.1 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2 and D5 is not mentioned in the description, nor are these documents identified therein.

4.2 The independent claims 1, 3 and 4 are not in the two-part form (Rule 6.3(b)(ii) PCT). The applicant can use any of the documents D1, D2 and D5 as the closest state of the art when rewriting the claims in the two-part form.

4.3 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

4.4 When filing amended claim(s) the applicant should at the same time bring the description into conformity with the amended claims. Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed (Article 19, 34 PCT). In order to facilitate the examination of the conformity of the amended application with the requirements of Articles 19 and 34 PCT, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based. If the applicant regards it as appropriate these indications could be submitted in handwritten form on a copy of the relevant parts of the application as filed.

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